

LIPOPHILIC INORGANIC FILLER AND COMPOSITE RESIN COMPOSITION

Patent Number: JP9087096
Publication date: 1997-03-31
Inventor(s): NAKAZAWA HIROMOTO;; YAMADA HIROHISA;; TAMURA TAKASHI;; HOSOKAWA TERUO;; INOUE HIROFUMI;; MOGI YOSHIHIRO
Applicant(s): NATL INST FOR RES IN INORG MATER;; SHOWA DENKO KK
Requested Patent: ☐ JP9087096
Application Number: JP19950248167 19950926
Priority Number (s):
IPC Classification: C30B29/34; C01B33/44; C08J5/10; C08K3/00
EC Classification:
Equivalents:

Abstract

PROBLEM TO BE SOLVED: To obtain a lipophilic inorg. filler well swollen with a small amt. of org. cations and improving the heat resistance and rigidity of a composite resin compsn. having a high aspect ratio.
SOLUTION: Org. cations are intercalated into a swellable silicate represented by the formula $[A_a(X_bY_c)(Si_4-dAl_d)O_{12}(OH)_2F_{2-e}]$ and having $\geq 2 \mu m$ average grain diameter of single crystal grains, 70-250 \AA /charge charge density and a smectite structure to obtain the objective lipophilic inorg. filler. In the formula, $0.2 \leq a \leq 0.7$, $0 \leq b \leq 3$, $0 \leq c \leq 2$, $0 \leq d \leq 4$, $0 \leq e \leq 2$, A is at least one cation selected from among alkali metal ions and alkaline earth metal ions, X and Y are cations entering into each octahedron in the smectite structure, X is at least one among Mg, Fe, Mn, Ni, Zn and Li, and Y is at least one among Al, Fe, Mn and Cr.

Data supplied from the esp@cenet database - I2